

Extension and Training in Organic Farming and Participatory Methods

Tayfun Özkaya

Department of Agricultural Economics, Faculty of Agriculture, Ege University, Turkey

Introduction

The extension model in organic farming should differ from the conventional farming extension model. Also, organic farming requires more knowledge than conventional models. These facts bring extension to a very critical point for organic farming. In this paper the required extension model and the methods will be presented.

Knowledge and Information Systems in Conventional Farming and Organic Farming

All over the world there has been a rapid shift to “organic farming” or “low external input & sustainable farming” (LEISA) systems. These environmentally friendly forms of crop-protection, nutrient, water and weed management require new production systems, technologies and farming practices, which tend to be more ‘knowledge intensive’ than those which preceded them (Leeuwis, 1998, Röling & Van de Fliert, 1994)

The conventional extension model is a linear model. The innovations created by research are transmitted by extension to farmers. There is a clear job distinction between these parties.

RESEARCH —————> EXTENSION —————> FARMER

The problems received from farmers are transferred to researchers to find a solution. The recommendations are generally ‘blanket recommendations’ that cover vast geographical areas and farmer typologies. They command do’s and don’ts. The farmer doesn’t need to reflect upon much nor to conduct extensive experiments. He/she may follow the instructions. A marketing approach has been developed to solve some problems in this model. The farmers are grouped in market segments for the information services. Separate packages of recommendations are prepared and sent by the extension workers. The model is more or less the same. The farmer is passive in this model for knowledge generation and dissemination.

A new extension model has to be used in organic farming. The organic farming has to be ‘knowledge intensive’. In the conventional farming there is no need to have sophisticated and site specific interventions. If there is a pest you may use the pesticide as recommended. But in organic farming you don’t have this option. If you don’t want the pest from the very beginning of production you will have to take some sophisticated measures. These also have to be site specific. Every part of nature is unique and different from others. Also, the characteristics of the site are at constant risk. No extension worker can perfectly evaluate the situation and give sound recommendation to farmers without collaborating with the farmer. The farmer has to become better acquainted with and reflect on the issues more in-depth. There is a complex learning process in organic farming. The extension agents have to refrain from both presenting themselves as experts or teachers and providing pre-prepared lectures, recipes and advice.

Instead a linear model for the extension system depicts how the farmers, researchers and extension workers have to collaborate in close relations. All stakeholders are interested in knowledge generation, usage of information and dissemination of information. The model is demonstrated in the figure. Intersecting areas represent collaborations. The stakeholders are equal. The farmers have to be respected as knowledge generators and they have the capacity to be good decision makers.

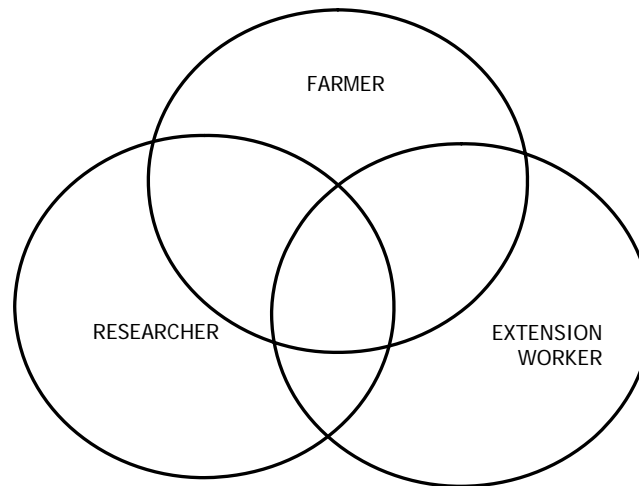


Figure 1. Equal collaborators

A new Education Philosophy

In organic farming extension needs a different education philosophy. The famous educator Paolo Freire calls this 'liberating education' (Freire, 1968, 1982). This is also a problem solving process. It depends on dialogue. Dialogue is the key word for this model. The old system education is called 'banking or domesticating education'. The student is filled with knowledge. Like a banker the student uses this knowledge whenever it is needed. The students are like empty baskets. In this model there is a given reality which man may accept. In the liberating education there is interaction between teachers and students.

The method is transference of knowledge and slogans in 'banking education'. In liberating education reflection and actions are taken together. Reflection only is referred to as 'verbalism'; action only is referred to as 'actionism'. In banking education the teacher teaches and knows everything. He/she thinks talks and acts. He/she disciplines and is the subject of the learning process. The students are taught, they know nothing and have the illusion of acting through the action of the teacher. They are disciplined. They are the objects.

The object of the education in banking education is alienation. In our case it is to force the farmers to accept industrial farming to use chemicals. In this model men become objects, convinced of their radical incapacity to control their destiny. This is fatalism. Industrial farming is a fatalistic option. In liberating education the object is liberation. There is critical consciousness. In this model men become subjects of their history, conscious of their radical capacity to liberate themselves mutually and to create a new reality, as a new common destiny.

For farmers, organic farming is liberation from industrial farming. But it is not easy. They can't stick to extension recommendations only. It needs a different education model. The farmer has to interact with extension workers, researchers and others.

Extension Services For Organic Farming

A review of the situation in the EU (and three non-EU countries) in 1997 showed that information and advice is provided by a variety of governmental and private organizations. The organizational structure ranges from full integration into the mainstream agricultural extension institutions to total separation, and from publicly funded provision of information and free on-farm advice to organic or interested conventional producers, over self help groups of farmers to fully commercialized expert consultancy services (Lambkin et al., 1999). Information and advice is funded either by public support, producer levies and fees, private sponsorship or a combination of these. In some mainly southern countries, the organized advisory provision is still very limited (Padel, 2001).

In most countries organic producer associations are important actors in the sector. They provide information to producers. Their technical services range from publications (magazines, technical notes), over farm walks and open days to the employment of specialist advisors for farm visits, the latter being generally restricted to members only. If such organizations are the main supplier of information, access can be difficult for non-members, such as interested conventional farmers (Padel, 2001)

In some countries (e.g. France, Scandinavia and German speaking nations) the general agricultural extension services are increasingly involved in information and advice on organic farming.

Purely commercial extension services or private consultants are likely to benefit from a very limited number of farmers with higher incomes. (Padel, 2001)

The study group model of The Netherlands and Denmark may be a very effective model for organic producers. In this model farmers are very active in information seeking, evaluation and research activities.

Some Participatory Approaches and Methods for Extension in Organic Farming

Since the nature of the organic farming requires dialogue between farmers and extension workers the participatory approaches fit very well. There are many variations for participatory approaches and terms, some more widely used than others like PRA. Participatory Rural Appraisal (PRA), for example, is now practiced in at least 130 countries (Pretty et al, 1995). The Participatory Rural Appraisal (PRA) approach evolved from a series of qualitative multidisciplinary approaches for learning about local level conditions and local peoples' perspectives, including Rapid Rural Appraisal (RRA) and Agroecosystem Analysis. (Jennifer and Narayan, 1998).

PRA entails groups of local people analysing their own conditions and choosing their own means of improving them. They may use a variety of tools, such as maps and diagrams and the support of a trained facilitator. It is fairly similar to Rapid Rural Appraisal (RRA), a technique developed earlier for analysing the needs of rural communities quickly, cost effectively and with little disruption to everyday life. But while RRA relies heavily on outsiders PRA involves local people more in making decisions about the matter and what to do (Chambers, 1996).

These participatory approaches share common principles: (Pretty, 1995)

- A defined methodology and systemic learning process. The focus is on cumulative learning by all the participants, which include both professional trainees and local people. Given the

focus of these approaches as systems of joint analysis and interaction, their use has to be participative.

- Multiple perspectives. A central objective is to seek diversity, rather than simplify complexity. This recognises that different individuals and groups make different evaluations of situations, which lead to different actions. Everyone's views are heavy with interpretation, bias and prejudice and this implies that there are multiple possible descriptions of any real-world activity. Everyone is different and important.
- Group learning process. All involve the recognition that the complexity of the world will only be revealed through group analysis and interaction. There are three possible mixes of investigators: those from different disciplines, from different sectors, and from the outside (professionals) and the inside (the local people)
- Context specific. The approaches are flexible enough to be adapted to suit each new set of conditions and actors, and so there are multiple variants.
- Facilitating experts and stakeholders. The methodology is concerned with the transformation of existing activities to try to improve people's situations. The role of the external 'expert' is best thought of as helping people carry out their own study to achieve something.
- Leading to change. The participatory process leads to debate about change, and debate changes the perceptions of the actors and their readiness to contemplate action.

Some Methods and Techniques

- Participatory mapping
- Problem ranking
- Agricultural calendar
- Venn diagram
- Participatory pest analysis

References

- [1] Chambers, R. (1996) The PRA revolution, In: Institute of Development Studies, Introductory PRA Methodology Pack, London.
- [2] Freire, P. et al (1968) Pedagogy of the Oppressed, New York: The Seabury Press. (Turkish translation: Freire, P. (1991) Ezilenlerin Pedagojisi, Ayrıntı Yayınları)
- [3] Freire, P. (1982) Education for Critical Consciousness, New York: Continuum Books.
- [4] Lambkin, N., C. Foster, S. Padel and P. Midmore (1999). The Policy and Regulatory Environment for Organic Farming in Europe, In: Organic farming in Europe: Economics and Policy, University of Hohenheim, Hohenheim.
- [5] Leeuwis, Cees (1998), Changing Roles in Technology Development for knowledge Intensive Agriculture: A Social Science Perspective on Interactive Prototyping. In: Markey, A., Phelan, J. & Wilson, S., (1997) Proceedings of the 13th European Seminar on Extension Education, August 31-September 6, 1997, University College Dublin, Ireland, pp.172-192.
- [6] Padel, Susanne (2001) Information and Advisory Services for Organic Farming in Europe, In: Abstract for 15th ESEE Workshop, Wageningen, August 2001.
- [7] Pretty, J., I. Guijt, J. Thompson and I. Scoones (1995) Participatory Learning & Action- A Trainers Guide, International Institute for Environment and Development, London. Pp. 56-57.

- [8] Rietbergen, J. and D. N. McCracken (1998), Participation and Social Assessment, Tools and Techniques, Washington.
- [9] Röling, N.G. and E. van de Fliert (1994), Transforming Extension for Sustainable Agriculture: The Case of Integrated Pest Management in Rice in Indonesia, In: Agriculture and Human Values, Vol.11, No.2/3 Spring and Summer, pp.96-108.